

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed July 22, 2004. Claims 1-10 and 12-19 remain pending. Through this response, Applicant has cancelled claim 11, without prejudice, and has amended claims 1, 5, 8, 12, and 17. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Rejections Under 35 U.S.C. §102

A. Statement of the Rejection

The Office Action indicates that claims 1 - 19 stand rejected under 35 U.S.C. §102(3) as allegedly being anticipated by *Davis et al.* (*Davis*, USPN 6,701,449). Applicant respectfully traverses this rejection.

B. Discussion of the Rejection

It is axiomatic that “[a]nticipation requires the disclosure in a single prior art reference of *each element* of the claim under consideration.” *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)(emphasis added). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e):

Independent Claim 1

With regard to independent claim 1, Applicant claims (with emphasis added):

1. A computer system comprising:
a server coupled to a client via a network;

a first iSCSI controller coupled to the server via the network for receiving an I/O request;

a second iSCSI controller coupled to the server via the network for receiving an I/O request, said first iSCSI controller adapted to assume the role of said second iSCSI controller and ***process the I/O request therefor without host intervention*** in the event the second iSCSI controller fails; and

a storage system for reading and writing an I/O request received from the first and second iSCSI controllers, the storage system being coupled to said first and second controllers.

Applicant respectfully submits that *Davis* does not disclose the above emphasized claim language. The Office Action cited various sections of *Davis*, most notably column 4, lines 40-45, which provides, respectively, as follows:

The SCMs 108, 110 are connected to both the host network 130 and to array controllers 202, 204. Note that every host network interface card (NIC) 210 connections on one SCM is duplicated on the other. This allows a SCM to assume the IP address of the other on every network in the event of a SCM failure. The NICs 212 in each SCM 108, 110 are optionally dedicated for communications between the two SCMs.

From the above description, it appears that the SCMs communicate with the network through a host interface (see also element 210, FIG. 2). This suggests that in the event of a failure, the host retries the request in order for the request to be processed by the SCM that is in an operational state, otherwise data loss may occur. (see also col. 1, lines 50-55) Thus, *Davis* does not disclose, teach, or suggest a second iSCSI controller coupled to the server via the network for receiving an I/O request, said first iSCSI controller adapted to assume the role of said second iSCSI controller and ***process the I/O request therefor without host intervention*** in the event the second iSCSI controller fails. Since *Davis* does not disclose the emphasized claim language, Applicant respectfully requests that the rejection to independent claim 1 be withdrawn.

Because independent claim 1 is allowable over *Davis*, corresponding dependent claims 2-4 are allowable as a matter of law for at least the reason that dependent claims 2-4 contain all elements of their respective base claim. See, e.g., *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Independent claim 5

With regard to independent claim 5, Applicant claims (with emphasis added):

5. A method for ensuring the availability of a storage system, the method comprising the steps of:
 - providing a first iSCSI controller having a first network address for processing an I/O request sent to the first network address;
 - providing a second iSCSI controller having a second network address for processing an I/O request sent to the second network address;
 - sensing the failure of the first controller;
 - arranging for the second controller to assume control of the first network address to receive the I/O request sent to the first address; and
 - processing the I/O request without host intervention.***

The SCMs in *Davis* communicate with the network through a host interface (see also element 210, FIG. 2). This suggests that in the event of a failure, the host retries the request in order for the request to be processed by the SCM that is in an operational state, otherwise data loss may occur. (see also col. 1, lines 50-55) Thus, *Davis* does not disclose, teach, or suggest ***processing the I/O request without host intervention*** with the second iSCSI controller in the event the first iSCSI controller fails. Since *Davis* does not disclose the emphasized claim language, Applicant respectfully requests that the rejection to independent claim 5 be withdrawn.

Because independent claim 5 is allowable over *Davis*, corresponding dependent claims 6-7 are allowable as a matter of law.

Independent Claim 8

With regard to independent claim 8, Applicant claims (with emphasis added):

8. A computer system comprising:
 - a server connected to a network;
 - a first iSCSI controller having a first network address for processing an I/O request sent to/from the first network address, said first iSCSI controller connected to the server via the network;

a second iSCSI controller having a second network address for ***processing an I/O request without host intervention***, said I/O request sent to/from the second network address, said second iSCSI controller connected to the server via the network, said second iSCSI controller adapted to assume responsibility for the first network address in the event the first iSCSI controller fails; and
a storage system connected to the first and second iSCSI controllers.

The SCMs in *Davis* communicate with the network through a host interface (see also element 210, FIG. 2). This suggests that in the event of a failure, the host retries the request in order for the request to be processed by the SCM that is in an operational state, otherwise data loss may occur. (see also col. 1, lines 50-55) Thus, *Davis* does not disclose, teach, or suggest a second iSCSI controller having a second network address for ***processing an I/O request without host intervention***, said I/O request sent to/from the second network address, said second iSCSI controller connected to the server via the network, said second iSCSI controller adapted to assume responsibility for the first network address in the event the first iSCSI controller fails, as recited in claim 8. Since *Davis* does not disclose the emphasized claim language, Applicant respectfully requests that the rejection to independent claim 8 be withdrawn.

Because independent claim 8 is allowable over *Davis*, corresponding dependent claims 9-10 are allowable as a matter of law.

Independent Claim 12

With regard to independent claim 12, Applicant claims (with emphasis added):

12. A method for processing I/O requests to or from a storage system via first and second iSCSI controllers, the iSCSI controllers having first and second network addresses, comprising the steps of:
establishing communication between the first iSCSI controller and the second iSCSI controller;
storing the second address in memory of the first iSCSI controller;
monitoring the second controller to detect if it has failed; and

processing an I/O request sent to the second network address by the first controller, in the event the second controller fails, ***said processing occurring without host intervention.***

The SCMs in *Davis* communicate with the network through a host interface (see also element 210, FIG. 2). This suggests that in the event of a failure, the host retries the request in order for the request to be processed by the SCM that is in an operational state, otherwise data loss may occur. (see also col. 1, lines 50-55) Thus, *Davis* does not disclose, teach, or suggest processing an I/O request sent to the second network address by the first controller, in the event the second controller fails, ***said processing occurring without host intervention***, as recited in claim 12. Since *Davis* does not disclose the emphasized claim language, Applicant respectfully requests that the rejection to independent claim 12 be withdrawn.

Because independent claim 12 is allowable over *Davis*, corresponding dependent claims 13-16 are allowable as a matter of law.

Independent Claim 17

With regard to independent claim 17, Applicant claims (with emphasis added):

17. A computer program for performing the steps of a method for processing I/O requests to or from a storage system via first and second iSCSI controllers, the iSCSI controllers having first and second network addresses, the method comprising the steps of:
establishing communication between the first iSCSI controller and the second iSCSI controller;
storing the second address in memory of the first iSCSI controller;
monitoring the second controller to detect if it has failed; and
processing an I/O request sent to the second network address by the first controller, in the even the second controller fails, ***said processing occurring without host intervention.***

The SCMs in *Davis* communicate with the network through a host interface (see also element 210, FIG. 2). This suggests that in the event of a failure, the host retries the request in order for the request to be processed by the SCM that is in an operational state, otherwise data loss may occur. (see also col. 1, lines 50-55) Thus, *Davis* does not disclose, teach, or suggest

processing an I/O request sent to the second network address by the first controller, in the even the second controller fails, *said processing occurring without host intervention*, as recited in claim 17. Since *Davis* does not disclose the emphasized claim language, Applicant respectfully requests that the rejection to independent claim 17 be withdrawn.

Because independent claim 17 is allowable over *Davis*, corresponding dependent claims 18-19 are allowable as a matter of law.

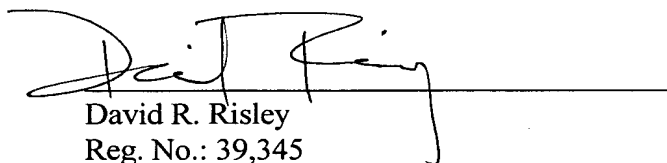
II. Cited Art Made of Record

The cited art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

For at least the reasons set forth above, Applicants respectfully submit that all rejections have been traversed, and that the now pending claims 1-10, 12-19 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



David R. Risley
Reg. No.: 39,345

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

Oct. 22, 2004
Marianne T. Boland
Signature